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(54) Title: STEPPED BALLOON CATHETER FOR TREATING VASCULAR BIFURCATIONS

(57) Abstract: A stepped balloon catheter prosthesis deployment system is disclosed for placement of a prosthesis across an Os opening from a main body lumen to a branch body lumen. The prosthesis comprises a radially expandable support at one end, a circumferentially extending link at the other end and at least one frond extending axially therebetween. The prosthesis is configured to be deployed from a stepped diameter balloon with the support in the branch body lumen, with the circumferentially extending link in the main lumen and the frond extendable across the Os.